



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

and the second second					
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/523,990	03/13/2000	Mou-Shiung Lin	MEG99-005	6138	
28112 759	09/29/2003				
GEORGE O. SAILE & ASSOCIATES 28 DAVIS AVENUE POUGHKEEPSIE, NY 12603			EXAM	EXAMINER ·	
			WALSH, DANIEL I		
			ART UNIT	PAPER NUMBER	
		•	2876		
			DATE MAILED: 09/29/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

Var	
VII	

1	Applicati n N .	Applicant(s)			
Office Action Comments	09/523,990	LIN ET AL.			
Office Action Summary	Examin r	Art Unit			
	Daniel I Walsh	2876			
The MAILING DATE f this communication appears n the cover she t with the correspondence address Period f r Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1)⊠ Responsive to communication(s) filed on <u>09 J</u>	<u>uly 2003</u> .				
2a) This action is <b>FINAL</b> . 2b) ☐ Th	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4)⊠ Claim(s) <u>1-23 and 25</u> is/are pending in the app	olication.				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-23 and 25</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers					
9)☐ The specification is objected to by the Examine	r.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).			
11) The proposed drawing correction filed on	is: a)☐ approved b)☐ disappro	ved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
——3-—Copies-of-the-certified-copies-of-the-priority-documents-have-been-received-in-this-National-Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
. a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) · Patent Application (PTO-152)			
S. Palent and Trademark Office					

### **DETAILED ACTION**

1. Receipt is acknowledged of the Amendment received on 9 July 2003.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-10, 12-23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grigg et al. (US 6,337,122) in view of Jeng et al. (US 6,200,828).

Grigg et al. teaches a method of marking semiconductor chips by forming internal markings on a marking location upon an exterior surface of the chip for identification of the chip (col 1, lines 48+).

Grigg et al. is silent to the material formed over the marking location.

Jeng et al. teaches forming a non-black optically transmissive material over at least the—
marking location on the one exterior surface of the chip which non-black optically
transmissive/transparent material cannot be scraped off of the chip (abstract). It is understood
that the transparent material covering the enclosed chip is non black, allows the internal
markings of the chip to be viewed, and as an encapsulant, provides protection from damage as
the result of environmental and handling packages, as is well known in the art.

Re claim 4, it is well known and conventional in the art that barcodes are laser inscribable into a semiconductor package/chip and accordingly, that such internal markings are read by electromagnetic radiation, as is well known in the art (Xu col 1, lines 48+ US 6,121,574 and Duncan et al. FIG 1 and US 4,585,931).

Re claim 5, it is well known that glass (as taught by Jeng et al.) is transparent and can be colored without teaching away from the claimed invention. The choice and use of a colored glass that is transparent is an obvious smatter of design variation.

Re claim 6, it is understood that the glass as used by Jeng et al. prevents remarking indicia or identification marks on the chip.

Re claim 7, it is well known that glass is an optically transmissive material and that glass over the chip prevents remarking silicon for a semiconductor package.

Re claim 8, it is well known that indicia is read by reflecting radiation off of indicia, i.e. barcodes, machine readable indicia, etc.

Re claims 9 and 10, the limitations have been discussed above.

Re claim 12, Jeng et al. teaches that the colored material can be used for some prespecified identification purpose of the IC package. Though Jeng et al. is silent to the colored

Page 4

part being transparent, it is well known and obvious that glass or other suitable materials (plastic, polymers, etc.) for example, can be colored and transparent. Therefore, since Jeng et al. teaches colored parts for identification purposes, it would have been obvious to an artisan of ordinary skill in the art to use colored parts that are transparent as an obvious design variation to effect a desired result such as aesthetics, readability, identification means, etc., as transparent colored coatings/covers are well known in the art.

Re claims 13-21, the limitations have been discussed above.

Re claims 22, 23, and 25, the limitations have been discussed above. Further it is well known that a contact site can be provided on a surface of a chip (FIG. 1 Jeng et al., Tsuruta US 5,357,077), as is well known and conventional in the art.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Grigg et al. with those of Jeng et al.

One would have been motivated to do this in order to view the encapsulated chip while protecting the chip at the same time.

## Response to Arguments

3. Applicant's arguments with respect to claims 1-10, 12-23, and 25, have been considered but are moot in view of the new ground(s) of rejection.

#### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's 4. disclosure: Duncan et al. (US 4,585,931), Grigg et al. (US 6,585,927), Xu (US 6,121,574), Suh (US 6,069,089), Miura et al. (US 6,601,219), Kawakami et al. (US 5,240,737), Williams (US 4,082,873), Woelki et al. (US 5,329,090), Nakamura et al. (US 4,945,204), and Tsurta (US 5,357,077).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel Walsh** whose telephone number is **(703) 305-1001**. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 US.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [daniel.walsh@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set for the in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG-89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Application/Control Number: 09/523,990

Art Unit: 2876

Page 6

D. Walsh

DW 9/9/03

MICHAEL G. LEE

TECHNOLOGY CENTER 2800